IN THE CLAIMS

Please find below a listing of all of the pending claims. The status of each claim is set forth in parentheses. This listing will replace all prior versions, and listings, of claims in the present application.

1. (Currently Amended) A method of cost determination for paths between switches in a mesh, the ~~process~~ method comprising:

defining a set of paths between each pair of the mesh switches, each pair comprising a source switch and a destination switch;

calculating start-up costs for the paths; and

recalculating costs for the previously defined paths using a directed cost protocol by transmitting a directed cost packet down each of the previously defined paths from the destination switch to the source switch for each pair.

2. (Currently Amended) The method of claim 1 wherein the directed cost protocol comprises generating at ~~a first~~ the destination switch a cost packet with path information associated with a specific path.

3. (Currently Amended) The method of claim 2 wherein the directed cost protocol further comprises unicasting the cost packet via the specific path to ~~a second~~ the source switch.

4. (Previously Presented) The method of claim 3 wherein intermediate switches along the specific path each add cost information to the cost packet prior to forwarding the cost packet to a next switch along the specific path.

5. (Original) The method of claim 4 further comprising repeating the recalculation at periodic intervals.

6. (Previously Presented) The method of claim 5 wherein the directed cost protocol further comprises piggybacking information for more than one path into the cost packet.

7. (Previously Presented) The method of claim 1 wherein the previously defined paths are identified by path tags inserted into packets sent between the mesh switches.

8. (Original) The method of claim 1, wherein start-up cost packets are flooded through the mesh in order to define the set of paths between each pair of mesh switches and calculate the start-up costs.

9. (Currently Amended) A switching mesh comprising multiple packet switches, the switching mesh including

means for defining a set of paths between each pair of the mesh switches, each pair comprising a first switch and a second switch;

means for calculating start-up costs for the paths; and

means for recalculating costs for the previously defined paths using a directed cost

protocol by transmitting a directed cost packet down each of the previously defined paths

from the second switch to the first switch for each pair.

10. (Previously Presented) The switching mesh of claim 9 wherein the previously defined

paths are identified by path tags inserted into packets sent between the mesh switches, and

wherein start-up cost packets are flooded through the mesh in order to define the set of paths

between each pair of mesh switches and calculate the start-up costs.

11. (Previously Presented) The switching mesh of claim 10 further comprising means for

repeating the recalculation at periodic intervals.

12. (Currently Amended) The switching mesh of claim 11, wherein the directed cost protocol

comprises generating at a destination the second switch a cost packet with path information

associated with a specific path that begins at a source the first switch and ends at the

destination second switch and unicast transmission of the cost packet via the specific path to

the source first switch.

13. (Previously Presented) The switching mesh of claim 12 wherein intermediate switches

along the specific path each add cost information to the cost packet prior to forwarding the

cost packet to a next switch along the specific path.

14. (Previously Presented) The switching mesh of claim 13 wherein the directed cost protocol

further comprises piggybacking information for more than one path into the cost packet.

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15. (Currently Amended) A packet switch in a switching mesh, the ~~apparatus~~ packet switch

comprising:

a plurality of ports configured to connect to at least one destination switch in the

switching mesh; and

a switch control device coupled to the plurality of ports, wherein the switch control

device is configured to define a set of paths from the packet switch to the destination switch,

calculate start-up cost for the previously defined paths, and execute directed cost protocol

instructions in order to recalculate costs for previously defined paths by receiving a cost

packet transmitted from the destination switch down each of the previously defined paths.

16. (Currently Amended) The packet switch of claim 15 wherein the directed cost protocol

instructions are configured to generate [[a]] the cost packet with path information associated

with a specific path between the packet switch and ~~another mesh~~ the destination switch.

17. (Currently Amended) The packet switch of claim 16 wherein the directed cost protocol

instructions are further configured to unicast the cost packet via the specific path to the ~~other~~

~~mesh~~ packet switch.

18. (Previously Presented) The packet switch of claim 17 wherein the directed cost protocol instructions are further configured to repeat the recalculation of costs for previously defined paths at periodic time intervals.

19. (Previously Presented) The packet switch of claim 18 wherein the directed cost protocol instructions are further configured to piggyback information for more than one path into the cost packet.

20. (Previously Presented) The packet switch of claim 18 wherein the directed cost protocol instructions are further configured to perform a flood discovery of paths at longer periodic time intervals.

21. (Previously Presented) The packet switch of claim 20 wherein path costs determined by the flood discovery of paths are used to substitute more efficient paths for less efficient paths.